

To: Egan, Robert[egan.robert@epa.gov]; Greenwater, Anthony[greenwater.anthony@epa.gov];
Manville, Jennifer[manville.jennifer@epa.gov]
Cc: Dee.allen@ldftribe.com[Dee.allen@ldftribe.com]
From: Hanson, Kristen
Sent: Tue 5/9/2017 4:28:50 PM
Subject: USGS Update- upcoming geophysical opportunity- Kozak property access

Good Morning Bob,

The second phase of the USGS project associated with the Haskell Lake site is the groundwater-surface water interaction study. Field work is planned later this month and poses an opportunity to collect needed site specific data. Also, several times you have mentioned your interest in USGS and the study's advisement into lake bed samples. This field deployment offers the opportunity to collect data needed to inform lake bed advisement.

USGS May Geophysical Work:

- The week of May 15-19 USGS staff with Dr. Dave Hart from the Wisconsin Geological and Natural History Survey plan geophysics field work at the site and surrounding area. The plan includes passive seismic to measure depth to bedrock, and electrical resistivity and ground-penetrating radar to look at structure in the glacial deposits (GPR may also provide information on the bedrock surface). This will probably take about 3 days. Access to the Kozak property would provide data collection over the entire plume, better inform the numerical flow model, provide stratigraphy information within the very large data void area, and provide the data needed to advise USEPA on lakebed sampling. This is a unique opportunity to collect subsurface data across site data void areas.
- Slug tests are planned at available site wells. Currently no hydraulic conductivity data exists for the site. Should Monitoring wells on Kozak's property be available, slug tests could be performed and hydraulic conductivity data provided to the Haskell Lake Site Project.

Other Planned work that would benefit from access to site wells located on Kozak Property.

- Seasonal monitoring of groundwater levels at the site at the same time as nearby surface waters elevation measurements.

Results will be reported in a Scientific Investigations Report with attached maps and GIS datasets. Like previous USGS work, results and data will be shared as it becomes available and in advance of the Scientific Report Publication.

Also, it has been confirmed that LDF is offering law enforcement presence during any Kozak property access to avoid any misunderstandings regarding site access.

Kristen Hanson

Environmental Response Program Coordinator

Lac du Flambeau Tribal Natural Resource Department

Office: 715-588-4290

Cell : 715-614-4644

From: Hanson, Kristen

Sent: Friday, April 14, 2017 5:04 PM

To: egan.robert@epa.gov; Allen, Dee; 'Wawronowicz, Larry (lwawronowicz@ldftribe.com)';
Greenwater.anthony@Epa.gov; Manville, Jennifer (manville.jennifer@epa.gov)

Subject: USGS groundwater elevation data 3.1.2017, groundwater elevation-lake level graphs, and
realtime monitoring link

Bob,

Attached is a data table of groundwater elevations collected by USGS on March 1 2017. In addition the lake and stream gaged height on March 1 2017 were:

The 15 min gage height values for the creek varied from 10.84 - 10.85 feet throughout the day on 3/1/17.

The 15 min gage height values for the lake varied from 10.55 - 11.56 feet throughout the day 3/1/17.

The gauge height cannot be converted to a MSL elevation until the elevation of a reference mark is surveyed. I will send the updated Lake and Stream Elevation data, once this field work is completed.

In addition, I had previously sent the links to the real time Creek gauge and Lake Stage data available on the web. I thought it would be useful to share it again in this email.

The lake stage data can be found
here: https://waterdata.usgs.gov/nwis/uv?site_no=455430089550001

The creek data can be found here: https://waterdata.usgs.gov/nwis/uv?site_no=05392187

Also, you will find preliminary groundwater elevation and lake levels graphs. This is first draft preliminary data.

Kristen Hanson

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From: Hanson, Kristen

Sent: Wednesday, April 26, 2017 9:24 AM

To: Christopher.Saari@wisconsin.gov; Dave Larsen

Cc: egan.robert@epa.gov; Manville, Jennifer (manville.jennifer@epa.gov);
Greenwater.anthony@Epa.gov; Allen, Dee

Subject: USGS groundwater elevation data 3.1.2017, and realtime monitoring link

Chris and Dave,

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